SUMMARY OF MAJOR NIH SUPPORT MECHANISMS

1. **Research Grants**, the largest category of NIH research funding, supports: a) research projects; b) research centers; and c) other research grants (e.g., career development, cooperative agreements, and other research-related programs).

a. Research Projects (RPG) includes the traditional research projects, small research grants, research program projects, exploratory/developmental grants, Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) grants and cooperative agreements, and other research projects. SBIR and STTR grants and cooperative agreements are federally mandated programs and, for the purpose of this publication, generally excluded from research projects.

- **Traditional Research Projects (R01)** support a principal investigator on a discrete research project.

- **Small Research Grants (R03)** provide research support specifically limited in time and amount for studies in categorical program areas. These grants provide flexibility for initiating studies which are generally for preliminary short-term projects and are nonrenewable. Until FY 1994, the R03s were classified as "other research grants."

- **Research Program Projects (P01)** support broadly-based, often multidisciplinary, long-term research programs involving groups of investigators working on research projects that contribute to the overall program objective.

- **Exploratory/Developmental Grants (R21)** encourage the development of new research activities in categorical program areas. Support is generally restricted in level of support and time. Until FY 1994, they were classified as "other research grants." However, R21s awarded by NCRR are still included with "other research grants."

- **SBIR Grants (R43 and R44)** and **SBIR Cooperative Agreements (U43 and U44)** support projects limited in time and amount to establish the technical merit and feasibility of R&D ideas that may ultimately lead to commercial products or services.

- **STTR Grants (R41)** support cooperative R&D projects limited in time and amount between small business concerns and research institutions to establish the technical merit and feasibility of ideas that have potential for commercialization.

- **Other RPG awards** include:

  - **Academic Research Enhancement Awards (AREA, R15)** to support scientists at colleges that are not research-intensive, but train a significant number of research scientists on small-scale, health-related research projects.
  - **Hazardous Substances Basic Research Grant Programs (P42)** to support basic research directed towards understanding and attenuating the public health effects resulting from exposure to hazardous substances (NIEHS).
  - **First Independent Research Support and Transition (FIRST, R29) Awards** for new investigators to develop their research capabilities and demonstrate the merit of their research ideas.
  - **Outstanding Investigator Grants (R35)** and **Method to Extend Research in Time (MERIT, R37) Awards** to provide long-term support to outstanding, experienced investigators.
  - **James A. Shannon Director's Awards (R55)** to address the problem of unfunded but highly meritorious research applications, by providing limited awards to investigators to further develop, test, and refine their research techniques and improve their already meritorious applications. Until FY 1993, R55 awards were classified as "other research grants."
  - **Cooperative Agreements (U01)** to support a discrete, specified, circumscribed research project to be performed by the named investigator(s) in an area representing specific interests and competencies.
  - **Research Program Cooperative Agreements (U19)** to support research programs of multiple projects directed toward a specific major objective.

b. Research Center Grants support multidisciplinary, long-term research and development programs at research centers. Research centers usually have a clinical orientation and are usually developed in response to an announcement from an NIH institute/center requesting research in a specific area of need. Research center grants are awarded to institutions on behalf of a program director and a group of collaborating investigators.

c. Other Research Grants include:

- **Research Career Development Awards (K)** to support the development of outstanding scientists.
- Small general purpose awards to support biomedical and minority biomedical research grants.
- **Conference Grants (R13)** to support recipient sponsored and directed international, national or regional meetings, conferences and workshops.

- Awards to support small education, exploratory/developmental (NCRR only), research demonstration and dissemination projects.
- Small grants to support the purchase of equipment.
- Cooperative agreements to support clinical research in specific disease areas or to improve resources used to serve biomedical research.

2. **Research and Development Contracts** are negotiated with qualified domestic and foreign organizations to support basic, applied, or developmental research and to test or evaluate a product, material, device, or component for use by the research community. The initiative for this research generally originates within NIH.

3. **Training Awards** support the research training of scientists for careers in the behavioral and biomedical sciences, as well as help professional schools to establish, expand, or improve programs of continuing professional education. Training awards consist of institutional training grants (Ts) and individual fellowships (Fs). The primary training mechanisms are National Research Service Award (NRSA) institutional training grants and fellowships, and those specifically targeted for minority institutions and minority scientists.

   a. **Institutional Training Grants** include:

   - **T15** **Continuing Education Training Grants** to assist professional schools and other public and nonprofit institutions to establish, expand, or improve programs of continuing professional education, especially for programs of extensive continuation, extension, or refresher education dealing with new developments in the science of technology of the profession.
   - **T22** **Institutional Research Fellowships** to support an institution with an approved preceptor for a number of postdoctoral research training in a limited number of specified shortage biomedical science areas.
   - **T32** **Institutional National Research Service Awards (NRSA)** to enable institutions to make NRSA awards to individuals selected for predoctoral and postdoctoral research training in specified areas.
   - **T34** **Minority Access to Research Careers (MARC) Undergraduate Institutional Grants (NRSA)** to enable minority institutions to make NRSA awards to individuals selected for undergraduate research training in the biomedical and behavioral sciences.
   - **T35** **Short-Term Research Training Awards (NRSA)** to provide individuals with research training during off-quarters or summer periods to encourage research careers and/or research in areas of national need.

- **T36** **MARC Visiting Professors for Minority Institution Awards** (NIGMS) to increase the number of well-trained minority scientists in biomedical disciplines and to strengthen the research and teaching capabilities of minority institutions through a variety of training mechanisms such as visits by experienced scientists to minority institutions or workshops/conferences designed to enhance the research training experience of students/faculty from minority institutions.
- **T37** **Minority International Research Training Grants** (FIC) to enable domestic institutions to support biomedical and behavioral research training for minority students and faculty members at foreign sites.

b. Individual Fellowships funded include:

- **F05** **International Research Fellowships** (FIC) to provide collaborative research opportunities for qualified non-immigrant alien scientists who hold a doctoral degree or its equivalent in one of the biomedical or behavioral sciences.
- **F06** **Senior International Fellowships** (FIC) to provide opportunities to outstanding mid-career faculty members from U.S. schools of medicine, osteopathy, dentistry, public health, and other disciplines. with demonstrated productive scholarship and recognized stature in their profession to go abroad to study and share their expertise.
- **F15** **Scholars-in-Residence Programs** (FIC) to facilitate the exchange of ideas among distinguished science leaders and scholars who will spend from 3 to 12 months in residence at NIH.
- **F30** **Predoctoral Individual National Research Service Award (NRSA) for MD/PhD Fellowships** to provide predoctoral training which leads to the combined MD/PhD degrees.
- **F31** **Predoctoral Individual National Research Service Awards (NRSA)** to provide predoctoral individuals with supervised research training in specified health and health-related areas leading toward the research degree (e.g., Ph.D.).
- **F32** **Postdoctoral Individual National Research Service Awards (NRSA)** to provide postdoctoral research training to individuals to broaden their scientific background and extend their potential for research in specified health-related areas.
- **F33** **National Research Service Award (NRSA) for Senior Fellows** to provide opportunities for experienced scientists to make major changes in the direction of research careers, to broaden scientific background, to acquire new research capabilities, developed a few years ago, by taking time from regular professional responsibilities for the purpose of increasing capabilities to engage in health-related research.

- **F34** **Minority Access to Research Careers (MARC) NRSA Faculty Fellowships** to provide fellowships to selected faculty members from minority institutions to enable them to obtain advanced training in specified health and health-related areas.
- **F35** **Intramural NRSA Individual Postdoctoral Program Appointees** to support an individual postdoctoral trainee appointed for research training in the Intramural NRSA Research Training Program.
- **F37** **Medical Informatics Fellowships** (NLM) to provide postdoctoral training to individuals in the synthesis, organization, and management of knowledge. The training should be interdisciplinary--involving medicine, biotechnology, cognitive sciences, information science, and computer science.
- **F38** **Applied Medical Informatics Fellowships** to provide opportunities for scientists to make major changes in the direction of research careers for the purpose of engaging in the synthesis, organization, and management of knowledge.

4. **Remaining Extramural Awards** include:

a. Construction grants to create new research facilities.
b. Grants for repair, renovation and modernization of existing research facilities.
c. Medical library grants to establish or improve resources and services of libraries.
d. International training grants in epidemiology